

SOME NOTES ON IDAHO ORTHOPTERA, WITH THE DESCRIPTION OF A NEW
SPECIES OF TRIMEROTROPIS.

BY JAMES A. G. REHN.

The following notes and records are based on a small but interesting collection of Orthoptera made in the month of July at Springfield, Bingham County, Idaho, by Dr. Henry Skinner. One of the most interesting species in the collection is *Trimerotropis rebellis* Saussure, a form which stood on our lists as a species unrecognized in American collections for several decades.

MANTIDÆ.

Litaneutria minor (Scudder).

One female.

This is the first exact record of the species from Idaho, Scudder's only record from that State being "Southern Idaho," taken from Bruner's record of "*Ameles* sp."

ACRIDIDÆ.

Cordillacris affinis Morse.

Four females. July 25.

These specimens agree with the characters given by Morse for separating this species from *C. occipitalis*, and in addition the species is seen to differ in the narrower interspace between the eyes. This species was described from Ormsby County, Nevada, and is here recorded from outside that State for the first time.

Stirapleura delioatula (Scudder).

One female. July 25.

This is the first Idaho record of the species.

Hippisus neglectus (Thomas).

One female. July 25.

This specimen lacks the pale line along the posterior anal vein seen in some individuals.

Hippiscus validus Scudder.

Two females. July 24.

These specimens have the tegmina several millimeters longer than the measurement given by Scudder for the species, which was described from Blaine County, Idaho, and also exhibit other minor

differences; but inasmuch as the specimens show considerable individual variation in themselves, it appears preferable to regard the material in hand as *validus*, at least until further information is available.

Conozoa wallula Seudder.

One female. July 25.

Trimerotropis rebellis Saussure.

Two males, one female. One dated July 25.

These specimens fully agree with the original description of the species which was described from California. Rehn and Hebard's *T. bilobata* is the closest relative of this species, differing, however, in the characters given in the diagnosis of their species.

Trimerotropis gracilis (Thomas).

One female.

This species has been recorded from Birch Creek, Idaho.

Trimerotropis arenaceus n. sp.

Types: ♂ and ♀; Springfield, Bingham County, Idaho. July 25, 1906. (Henry Skinner) [Acad. Nat. Sci. Phila.]

Related to *T. albolineata* Bruner and *T. cristata* McNeill, with specimens of both of which it has been compared, differing from both in the more robust build, the glaucous caudal tibiae and the suppression of the dark dorsal bar on the entire length of the lateral lobes of the pronotum. The general color is much like that of *Trimerotropis maritima interior*, but the pronotal crest is very much more decided than in that race.

Size slightly less than the average for the genus; form moderately slender; surface of the body more or less distinctly punctate except for the glabrous venter of the thorax and abdomen. Head with the occiput and interocular region strongly arcuate and distinctly elevated dorsad of the disk of the pronotum, the interspace between the eyes being hardly (♂) or distinctly (♀) broader than twice the width of the basal antennal joint; fastigium nearly half again as long as broad, decidedly excavate with a low medio-longitudinal carina, lateral carinae well elevated, the depression extending caudad to between the eyes and not markedly delimited from the occiput, cephalad separated more or less distinctly by a V-shaped carina from the frontal costa; lateral forveolae distinct, impressed, tri-

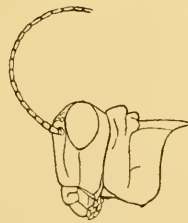


Fig. 1.—*Trimerotropis arenaceus* n. sp. Lateral outline of head and pronotum of male type. ($\times 3$.)

gonal; frontal costa compressed dorsad of the insertion of the antennæ, expanding between the antennæ, very slightly constricted ventrad of the ocellus and thence expanding to the clypeal suture, moderately sulcate for a short distance ventrad of the ocellus, slightly sulcate dorsad of the same; eyes quite (σ^7) or moderately (φ) prominent, in length about equal to (σ^7) or slightly shorter than (φ) the infraocular sulcus;

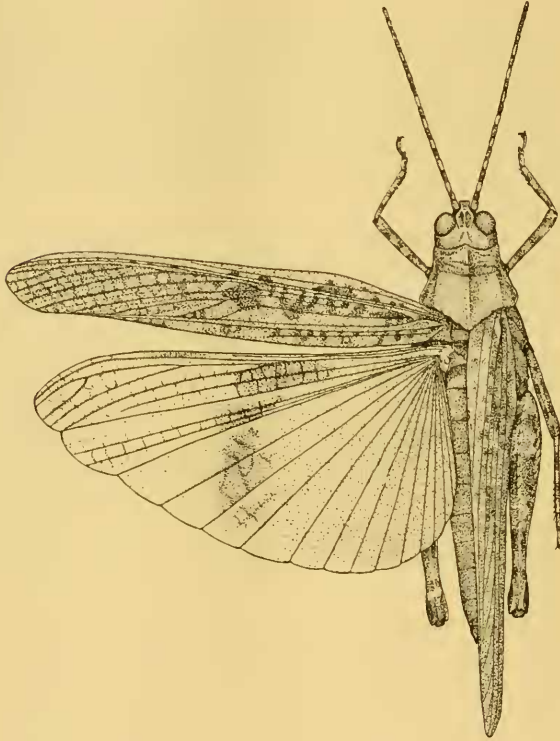


Fig. 2. — *Trimerotropis arenaceus* n. sp. Dorsal view of female type. ($\times 2$.)

antennæ distinctly exceeding the head and pronotum in length. Pronotum with the greatest dorsal width about equal to the greatest length; median carina distinctly elevated and cristate on the prozona, divided rather deeply into two lobes of which the cephalic is twice the length of the caudal, although but slightly higher than the caudal, the outlines of the lobes being rounded, except for the caudal portion of the margin of the cephalic lobe which is subangulate, varying in the two types, median carina distinct on the metazona, but not elevated except cephalad; lateral angles distinct, irregular cephalad,

carinate on the cephalic portions of both the prozona and metazona; cephalic margin broadly obtuse-angulate, caudal margin slightly obtuse-angulate, metazona about one and one-half times the length of the prozona; lateral lobes deeper than long, subequal in width, ventral margin oblique, the ventro-caudal margin rounded, ventrad with a very blunt and low process. Tegmina exceeding the apex of the abdomen by about (♀) or nearly (♂) the length of the head and pronotum together, rather slender, the greatest width contained about five and one-half times in the length, the apex oblique rotundato-truncate. Wings rather narrow, the greatest width very slightly more than half the length. Caudal femora of medium build, the ventral carina hardly arcuate and not produced; caudal tibiae with eight to nine spines on the external margin.

General color very pale pinkish ochraceous, becoming yellowish on the abdomen and venter, the overlying markings being dull, burnt umber. Head with the occiput obscurely mottled, the genæ pale but clouded with pale bluish and the carinae beaded with the darker color, a faintly indicated transverse bar indicated by very weak clouds and clustered beading on the carinae being present immediately ventrad of the antennae and another midway between this and the sutural margin; eyes raw sienna; antennae regularly annulate umber and pinkish, the annulations usually occupying a whole joint each. Pronotum uniformly stippled with the umber dorsad the lateral lobes with the metazona nearly uniform with the dorsum, the prozona with two longitudinal umber bands, one dorsad and the other mesad, the area between pale, a more or less distinct hoary white spot present about in the middle of the lateral lobes. Tegmina with the punctations of umber grouped irregularly into a median and one or two proximal groups, very poorly defined and limited almost entirely to the discoidal field, the distal half occasionally (♂ type) with an additional small irregular group indication and always with distinct infuscation of the longitudinal veins, infusate cross veins in some cases forming contrasting cells. Wings with the proximal half pale greenish yellow, the apical portion hyaline with the principal veins blackish brown; transverse bar blackish brown varying some in intensity, narrow, in no case solid but always with the vein infuscation giving the body to the bar, nearly or quite reaching the caudal margin but not continued on it toward the internal margin; spur rather broad, reaching halfway to the base of the wing, separated by a very narrow hyaline area from the wing band. Cephalic and median limbs annulate more or less distinctly by clouds and bead grouping on the carinae. Caudal femora with four distinct black

areas on the internal face, one proximal, one distal, one premedian, one postmedian, the base color here pale greenish yellow, external face with two more or less distinct oblique bands, dorsal face with the bars of the internal face continued more or less distinctly upon it, ventral face dull yellowish with a distinct preapical black band and occasionally (♀ type) a median one is more or less distinctly indicated; caudal tibiae glaucous, cream colored proximad with the genicular section blackish on the internal face, spines with their apical halves black; caudal tarsi pinkish ochraceous.

Measurements.

	♂	♀
Length of body.....	20.5 mm.	27.0 mm.
Length of pronotum.....	4.0 "	5.5 "
Length of tegmen.....	21.5 "	29.0 "
Length of caudal femur.....	11.5 "	15.0 "

A series of five male and three female paratypes have also been examined. These exhibit a slight amount of variation in size and an appreciable amount of difference in the intensity of the depth and size of the tegminal color blotches and in the intensity of the femoral bars. The wing bar is variable in intensity, but not in position or extent, and the general pale color varies only in two lines, *i.e.*, one toward a more pinkish type, the other toward a more distinctly ochraceous shade. The dorsal section of the frontal costa is distinctly sulcate in the majority of the paratype males, but this is not nearly so apparent in the females. In one of the few specimens in which a median blackish spot is present on the ventral sulcus of the caudal femora it extends distinctly toward the base.

Trimerotropis laticincta Saussure.

One female. July 25.

This specimen has the left tegmen considerably aborted, its length being but three-fourths that of the normal right one.

Trimerotropis vinculata Seudder.

Ten males, fourteen females. Several dated July 25, remainder not dated.

One specimen has the head, thorax and abdomen hoary, while the majority of the series are slightly darker and more contrasted in coloration than the usual type, the markings being blackish brown.

Circotettix carolinianus (Thomas).

Three males, one female. July 25.

These specimens are similar in size to a pair from Soda Springs,

Idaho. In two of the males which are spread the wings are without infuscation except along the radiate veins.

TETTIGONIDÆ.

Idiostatus variegata Caudell.

Two females.

The type material of this species consisted of a single female taken at Pocatello, Idaho, which remained unique until the present time. The measurements of the caudal femora and ovipositor of the Springfield specimens are as follows:

Length of caudal femora.....	19.5 mm.	22.5 mm.
Length of ovipositor.....	18.5 "	18.2 "

Stenopelmatus fasciatus Thomas.

Two females.